



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502
www.deq.idaho.gov

Governor Brad Little
Director John H. Tippetts

June 20, 2019

Clint Colvin, President
Fab Tec, Inc.
1605 Paradise Ridge Road
Moscow, Idaho 83843

RE: Facility ID No. 057-00055, Fab Tec, Inc., Moscow
Final Permit Letter

Dear Mr. Colvin:

The Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-2019.0006 Project 62219 to Fab Tec, Inc. located at Moscow for the increase in coating material usage and install air filtration systems. This PTC is issued in accordance with IDAPA 58.01.01.200 through 228 (Rules for the Control of Air Pollution in Idaho) and is based on the certified information provided in your PTC application received April 15, 2019.

This permit is effective immediately and replaces PTC No. P-2019.0006, issued on April 12, 2019. This permit does not release Fab Tec, Inc. from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.


Pursuant to the Construction and Operation Notification General Provision of your permit, it is required that construction and operation notification be provided. Please provide this information as listed to DEQ's Lewiston Regional Office, 1118 F Street, Lewiston, Idaho 83501, Fax (208) 799-3451.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a meeting with Phil Hagihara, Regional Air Quality Manager, at (208) 799-4884 to review and discuss the terms and conditions of this permit. Should you choose to schedule this meeting, DEQ recommends that the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any other staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to contact Christina Boulay at (208) 373-0502 or christina.boulay@deq.idaho.gov to address any questions or concerns you may have with the enclosed permit.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Simon".

 Mike Simon
Stationary Source Program Manager
Air Quality Division

MS\cb

Permit No. P-2019.0006 PROJ 62219
Enclosures

Air Quality

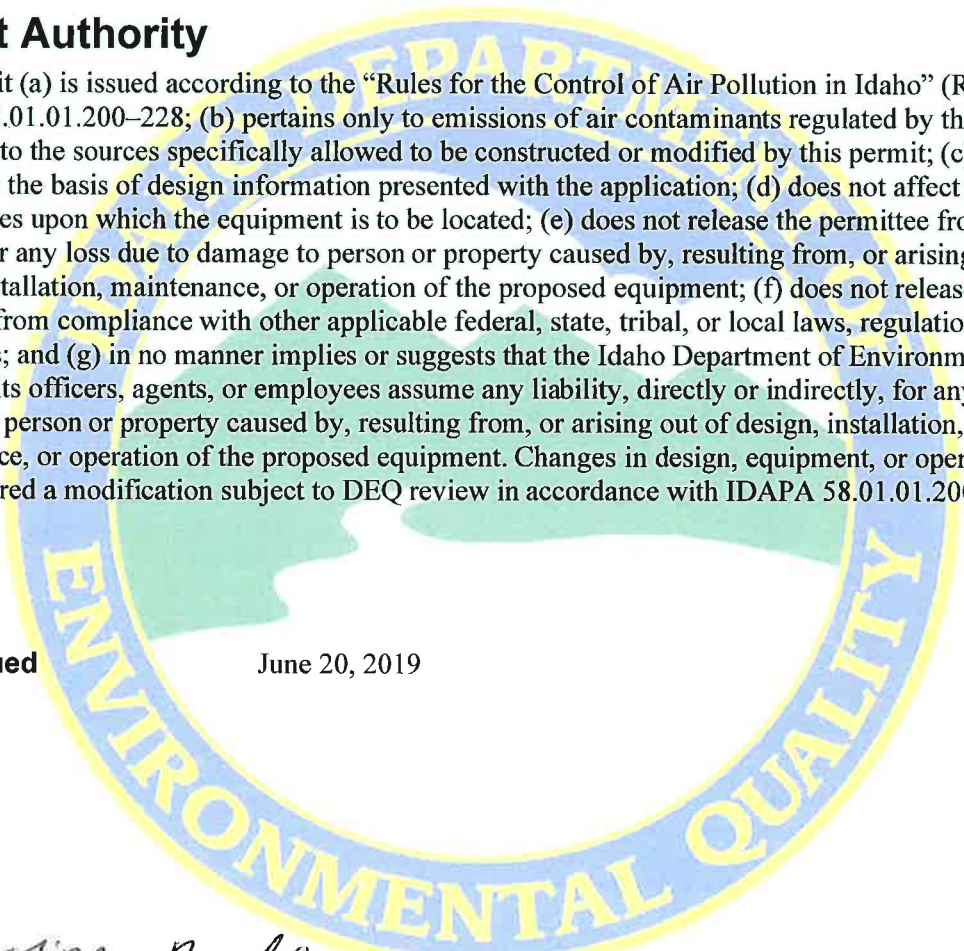
PERMIT TO CONSTRUCT

Permittee	Fab Tec, Inc.
Permit Number	P-2019.0006
Project ID	62219
Facility ID	057-00055
Facility Location	1605 Paradise Ridge Rd Moscow, Idaho 83843

Permit Authority

This permit (a) is issued according to the "Rules for the Control of Air Pollution in Idaho" (Rules), IDAPA 58.01.01.200–228; (b) pertains only to emissions of air contaminants regulated by the State of Idaho and to the sources specifically allowed to be constructed or modified by this permit; (c) has been granted on the basis of design information presented with the application; (d) does not affect the title of the premises upon which the equipment is to be located; (e) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (f) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; and (g) in no manner implies or suggests that the Idaho Department of Environmental Quality (DEQ) or its officers, agents, or employees assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment. Changes in design, equipment, or operations may be considered a modification subject to DEQ review in accordance with IDAPA 58.01.01.200–228.

Date Issued June 20, 2019

The seal of the Idaho Department of Environmental Quality is a circular emblem. It features a blue outer ring with the words "IDaho DEPARTMENT OF ENVIRONMENTAL QUALITY" in yellow. Inside the ring is a stylized map of Idaho in green, set against a white background.
Christina Boulay
Christina Boulay, Permit Writer

Dan Pagan
for, Mike Simon, Stationary Source Manager

Contents

1 Permit Scope 3

2 Plasma Cutting Operations 7

3 Grinding Operations 10

4 Welding Operations 12

5 Abrasive Blasting..... 14

6 Coating Operations 15

7 Shop Heaters 28

8 General Provisions..... 30

1 Permit Scope

Purpose

- 1.1 This is a modified permit to construct (PTC) to install and operate an overhead industrial maid filtration system in all three buildings, and increase the daily and annual coating usage.
- 1.2 Those permit conditions that have been modified or revised by this permitting action are identified by the permit issue date citation located directly under the permit condition and on the right-hand margin.
- 1.3 This PTC replaces Permit to Construct No. P-2019.0006, issued on April 12, 2019.

Regulated Sources

Table 1.1 lists all sources of regulated emissions in this permit.

Table 1.1 Regulated Sources

Permit Section	Source	Control Equipment
2	<u>Plasma Cutter Plasma 1:</u> Manufacturer: Hypertherm Model: Power Max 1250 G3 Handheld/Table: Table Manufacture Date: 2007	<u>Water Table:</u> Manufacturer: Hypertherm Model: Power Max 1250 G3 Type: Semi-wet water table PM ₁₀ control efficiency: 90.0% <u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives
	<u>Plasma Cutter Plasma 2:</u> Manufacturer: Hypertherm Model: Power Max 105 Handheld/Table: Table Manufacture Date: 2012	<u>Water Table:</u> Manufacturer: Hypertherm Model: Power Max 105 Type: Semi-wet water table PM ₁₀ control efficiency: 90.0% <u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives

Permit Section	Source	Control Equipment
	<u>Portable Plasma Cutter:</u> Manufacturer: Hypertherm Plasma Model: Power Max 1000 G3 Manufacture Date: 2008	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-4500 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives
	<u>Portable Plasma Cutter:</u> Manufacturer: Hypertherm Plasma Model: Power Max 65 Manufacture Date: 2012	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives
	<u>Portable Plasma Cutter:</u> Manufacturer: Hypertherm Plasma Model: Power Max 65 Manufacture Date: 2014	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives
3	<u>Bench Grinder:</u> Manufacturer: Enco Model: 10-inch, 2.0 hp Location: Shop 1	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-4500 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives
	<u>Bench Grinder:</u> Manufacturer: Jet Model: 6-inch, 0.5 hp Location: Shop 1	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives

Permit Section	Source	Control Equipment
	<u>Bench Grinder:</u> Manufacturer: Jet Model: 10-inch, 1.5 hp Location: Shop 2	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives
	<u>Bench Grinder:</u> Manufacturer: Jet Model: 8-inch, 1.0 hp Location: Shop 3	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives
4	Welders (9): Manufacturer: Lincoln Model: Invertec, Idelarc Manufacture Dates: 1992-2018 Type: Gas metal arc welding (GMAW) Wire: Hobart Fabco Excel-Arc 71 Location: Shop 1	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-4500 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives
	Welders (8): Manufacturer: Lincoln Model: Invertec, Idelarc Manufacture Dates: 1992-2018 Type: Gas metal arc welding (GMAW) Wire: Hobart Fabco Excel-Arc 71 Location: Shop 2	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives
	Welders (11): Manufacturer: Lincoln Model: Invertec, Idelarc Manufacture Dates: 1992-2018 Type: Gas metal arc welding (GMAW) Wire: Hobart Fabco Excel-Arc 71 Location: Shop 3	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives
5	Abrasive Blaster: Manufacturer: Gardner Denver Model: 0.5 inch nozzle #8 Booth: Three-sided structure Blasting media: Quartz sand Maximum capacity: 500 lb/hr	3-walled bunker (Fugitive)

Permit Section	Source	Control Equipment
6	Paint Guns: Paint 1 Manufacturer: Graco Model: G40 Type: Air Assisted 65% HVLP	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives
	Paint Guns: Paint 2 Manufacturer: Graco Model: G40 Type: Air Assisted 65% HVLP	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives
	Paint Guns: Paint 3 Manufacturer: Graco Model: G40 Type: Air Assisted 65% HVLP	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-4500 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives
7	Unit Name: Heaters #1-#26 Manufacturer: Dayton High-Intensity Model: 3E134 Manufacture Date: 1992-2018 Heat input rating: 0.090 MMBtu/hr each, 2.34 MMBtu/hr total Fuel: Natural gas	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 and T4500 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives <i>Note: All heaters are located in shops 1, 2, or 3</i>

2 Plasma Cutting Operations

2.1 Process Description

Fab Tech, Inc. performs semi-wet plasma cutting, and portable plasma cutting with plasma tables and plasma hand-held torches. The two semi-wet plasma cutting tables are, over water table mounted plasma cutters which process steel over water baths located in a building. The three hand-held plasma torches are used for spot cuts of steel. Plasma cutting occurs in shop 1, 2, and 3.

2.2 Control Device Descriptions

Table 2.1 Plasma Cutting Description

Emissions Units / Processes	Control Devices
Plasma Cutter 1	<p><u>Water Table:</u> Manufacturer: Hypertherm Model: Power Max 1250 G3 Type: Above water-semi-wet PM₁₀ control efficiency: 90.0%</p> <p><u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM10 and PM2.5 Or DEQ approved alternatives</p>
Plasma Cutter 2	<p><u>Water Table:</u> Manufacturer: Hypertherm Model: Power Max 105 Type: Above water-semi-wet PM₁₀ control efficiency: 90.0%</p> <p><u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM10 and PM2.5 Or DEQ approved alternatives</p>
Portable Plasma Cutter	<p><u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-4500 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM10 and PM2.5 Or DEQ approved alternatives</p>
Portable Plasma Cutter	<p><u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM10 and PM2.5 Or DEQ approved alternatives</p>
Portable Plasma Cutter	<p><u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM10 and PM2.5 Or DEQ approved alternatives</p>

Emission Limits

2.3 Emission Limits

The emissions from the plasma cutting operation shall not exceed any corresponding emissions rate limits listed in Table 2.2.

Table 2.2 Plasma Cutting Emission Limits ^(a)

Source Description	PM ₁₀ ^(b)		SO ₂		NO _x		CO		VOC	
	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)
Plasma Cutting ^(e)	3.92E-04	1.22E-03	--	--	8.42E-01	2.89E+00	--	--	--	--

- a) In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
- b) Particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.
- c) Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.
- d) Tons per any consecutive 12-calendar month period.
- e) Plasma cutting emission limits is for all plasma cutting, the two tables and the three hand-held torches.

[6/17/2019]

2.4 Opacity Limit

Emissions from the plasma cutting or any vent, or functionally equivalent opening associated with the plasma cutting, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

[4/12/2019]

Operating Requirements

2.5 Annual Hour Plasma Cutting Limits

The two semi-wet plasma cutting tables shall not exceed 6,240 hours per year (hr/yr) for each cutter per any consecutive 12-month period.

The three plasma cutting torches shall not exceed 624 hours per year (hr/yr) combined per any consecutive 12-month period.

[6/17/2019]

2.6 O&M Manual

Within 60 days of initial start-up the permittee shall have developed a semi-wet plasma cutting Operations and Maintenance (O&M) Manual that must include inspection of the water bath. The O&M Manual shall describe the procedures that will be followed to ensure that all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit are at all times (except as provided in the "Rules for the Control of Air Pollution in Idaho") maintained in good working order and operate as efficient as practicable to meet the manufacturer's air pollution control device specifications. This manual shall remain on-site at all times and shall be made available to DEQ representatives upon request.

[4/12/2019]

Monitoring and Recordkeeping Requirements

2.7 Annual Hour Plasma Cutting Limits Monitoring

Each calendar month, the permittee shall monitor and record the operating hours of each plasma cutter for the previous month in hours per month (hr/mo). Annual plasma cutter operation shall be determined by summing the monthly operation over the previous consecutive 12-month period to demonstrate compliance with the Annual Hour Plasma Cutting Limits permit condition.

[4/12/2019]

2.8 Filter System Procedures

The permittee shall install and operate a filter system consisting of MERV-15 or equivalent filters to control PM_{2.5}, PM₁₀ emissions from the plasma cutting operations, with a control efficiency of 90.94% or greater.

[6/17/2019]

2.9 Filter System Documentation

The permittee shall keep the documentation of the filter control efficiencies from the manufacturer to show the filters have control efficiencies for PM_{2.5} and PM₁₀ equal or greater than 90.94%.

Or

For DEQ approved alternatives, the permittee shall keep the documentation on the filter control efficiencies from the manufacturer to show control efficiencies for PM_{2.5} and PM₁₀ equal or greater than 90.94%.

[6/17/2019]

2.10 Recordkeeping

Records shall be kept according to the Monitoring and Recordkeeping General Provision. Supporting information includes, but is not limited to, steel SDS sheets, receipts, and inventory logs.

[4/12/2019]

3 Grinding Operations

3.1 Process Description

Fab Tech, Inc. uses four bench grinders to perform finishing work on fabricated parts and equipment. Grinding is conducted in Shops 1, 2, and 3, alongside other fabrication activities.

3.2 Control Device Descriptions

Table 3.1 Grinding Operations Description

Emissions Units / Processes	Control Devices
Bench Grinder: Manufacturer: Enco Model: 10-inch, 2.0 hp Location: Shop 1	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-4500 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives
Bench Grinder: Manufacturer: Jet Model: 6-inch, 0.5 hp Location: Shop 1	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives
Bench Grinder: Manufacturer: Jet Model: 10-inch, 1.5 hp Location: Shop 2	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives
Bench Grinder: Manufacturer: Jet Model: 8-inch, 1.0 hp Location: Shop 3	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives

[6/17/2019]

Emission Limits

3.3 Emission Limits

The emissions from the grinding operations shall not exceed 3.79E-04 tons per year (T/yr) PM₁₀ for any consecutive 12-calendar month period.

[6/17/2019]

3.4 Opacity Limit

Emissions from the grinding operation or any vent, or functionally equivalent opening associated with the grinding operation, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

[6/17/2019]

Operating Requirements

3.5 Annual Grinding Wheel Usage Weight Limits

Grinding wheel usage shall not exceed 1.40 tons per year (T/yr) per any consecutive 12-month period.

[6/17/2019]

Monitoring and Recordkeeping Requirements

3.6 Annual Grinding Wheel Usage Limits

Each calendar month, the permittee shall monitor and record the amount of the grinding wheel usage for the previous month in weight of wheels used per month. Wheel usage weight shall be determined by summing the monthly wheel usage weight over the previous consecutive 12-month period to demonstrate compliance with the Annual Grinding Wheel Usage Weight Limit Permit Condition.

[4/12/2019]

3.7 Filter System Procedures

The permittee shall install and operate a filter system consisting of MERV-15 or equivalent filters to control PM_{2.5}, PM₁₀ emissions from the grinding operations, with a control efficiency of 90.94% or greater.

[6/17/2019]

3.8 Filter System Documentation

The permittee shall keep the documentation of the filter control efficiencies from the manufacturer to show the filters have control efficiencies for PM_{2.5} and PM₁₀ equal or greater than 90.94%.

Or,

For DEQ approved alternatives, the permittee shall keep the documentation on the filter control efficiencies from the manufacturer to show control efficiencies for PM_{2.5} and PM₁₀ equal or greater than 90.94%.

[6/17/2019]

3.9 Recordkeeping

Records shall be kept according to the Monitoring and Recordkeeping General Provision. Supporting information includes, but is not limited to, grinding wheel disk SDS sheets, receipts, and inventory logs.

[4/12/2019]

4 Welding Operations

4.1 Process Description

A primary component of Fab Tech, Inc.'s fabrication operations is welding. Welding operations occur in Shops 1, 2, and 3. Fab Tech, Inc.'s welding staff use Hobart Select Arc 71 brand welding wire. No other type or brand of wire is planned for use by Fab Tech, Inc.

4.2 Control Device Descriptions

Table 4.1 Welding Operations Description

Emissions Units / Processes	Control Devices
Welders (9): Manufacturer: Lincoln Model: Invertec, Idelarc Manufacture Dates: 1992-2018 Type: Gas metal arc welding (GMAW) Wire: Hobart Fabco Excel-Arc 71 Location: Shop 1	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-4500 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives
Welders (8): Manufacturer: Lincoln Model: Invertec, Idelarc Manufacture Dates: 1992-2018 Type: Gas metal arc welding (GMAW) Wire: Hobart Fabco Excel-Arc 71 Location: Shop 2	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives
Welders (11): Manufacturer: Lincoln Model: Invertec, Idelarc Manufacture Dates: 1992-2018 Type: Gas metal arc welding (GMAW) Wire: Hobart Fabco Excel-Arc 71 Location: Shop 3	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives

[6/17/2019]

Emission Limits

4.3 Emission Limits

The emissions from the welding operations shall not exceed 2.71E-02 tons per year (T/yr) PM₁₀ for any consecutive 12-calendar month period.

[6/17/2019]

4.4 Opacity Limit

Emissions from the welding operation or any vent, or functionally equivalent opening associated with the welding operation, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

[4/12/2019]

Operating Requirements

4.5 Annual Welding Wire Usage Limits

Welding wire usage shall not exceed 30,456 pounds of welding wire per year (lbs/yr) per any consecutive 12-month period.

[6/17/2019]

4.6 Welding Wire Type

The permittee shall only use Hobart Select Arc 71 wire, or equivalent.

For the purpose of this Permit Condition, “or equivalent” is defined as that a HAP and TAP content of new welding rod, as listed in the Safety Data Sheet (SDS), is equal to or less than the HAP and TAP content listed in its AP-42 Equivalent Electrode Type listed in this Permit Condition.

[6/17/2019]

Monitoring and Recordkeeping Requirements

4.7 Annual Welding Wire Usage Limits Monitoring

Each calendar month, the permittee shall monitor and record the amount of the welding wire for the previous month in pounds per month. Welding wire usage shall be determined by summing the monthly wire usage over the previous consecutive 12-month period to demonstrate compliance with the Annual Welding Wire Usage Limit Permit Condition.

[4/12/2019]

4.8 Filter System Procedures

The permittee shall install and operate a filter system consisting of MERV-15 or equivalent filters to control PM_{2.5}, PM₁₀ emissions from the welding operations, with a control efficiency of 90.94% or greater.

[6/17/2019]

4.9 Filter System Documentation

The permittee shall keep the documentation of the filter control efficiencies from the manufacturer to show the filters have control efficiencies for PM_{2.5} and PM₁₀ equal or greater than 90.94%.

Or

For DEQ approved alternatives, the permittee shall keep the documentation on the filter control efficiencies from the manufacturer to show control efficiencies for PM_{2.5} and PM₁₀ equal or greater than 90.94%.

[6/17/2019]

4.10 Recordkeeping

Records shall be kept according to the Monitoring and Recordkeeping General Provision. Supporting information includes, but is not limited to, steel SDS sheets, receipts, and inventory logs.

[4/12/2019]

5 Abrasive Blasting

5.1 Process Description

Fab Tech, Inc. conducts abrasive blasting on large trailers and fabricated equipment in a three-sided, open-topped blasting pit. Due to the size of objects being blasted, it is not feasible to move blasting operations indoors.

5.2 Control Device Descriptions

Table 5.1 Abrasive Blasting Description

Emissions Units / Processes		Control Devices	Emissions Points
Abrasive Blaster:		3-walled bunker	Fugitive
Manufacturer:	Gardner Denver		
Model:	0.5 inch nozzle #8		
Booth:	Three-sided structure		
Blasting media:	Quartz or Garnet Sand		
Maximum capacity:	500 lb/hr		

[6/17/2019]

Operating Requirements

5.3 Annual Abrasive Blasting Media Usage Limits

Abrasive blasting media usage shall not exceed 100,000 pounds of quartz or garnet sand combined per any consecutive 12-month period.

[4/12/2019]

5.4 Abrasive Blasting Media Type

The permittee shall only use quartz or garnet sand abrasive blasting media.

[4/12/2019]

5.5 Reasonable Control of Fugitive Emissions

All reasonable precautions shall be taken to prevent particulate matter (PM) from becoming airborne, in accordance with IDAPA 58.01.01.650-651. In determining what is reasonable, consideration will be given to factors such as the proximity of dust emitting operations to human habitations and/or activities and atmospheric conditions that might affect the movement of PM.

[4/12/2019]

Monitoring and Recordkeeping Requirements

5.6 Annual Abrasive Blasting Media Usage Limits Monitoring

Each calendar month, the permittee shall monitor and record the usage of the abrasive blasting media for the previous month in pounds of media per month. Abrasive blasting media usage shall be determined by summing the monthly media usage over the previous consecutive 12-month period to demonstrate compliance with the Annual Abrasive Blasting Media Usage Limit Permit Condition.

[4/12/2019]

5.7 Recordkeeping

Records shall be kept according to the Monitoring and Recordkeeping General Provision. Supporting information includes, but is not limited to, steel SDS sheets, receipts, and inventory logs.

[4/12/2019]

6 Coating Operations

6.1 Process Description

Painting and/or coating manufactured components and equipment is a primary aspect of Fab Tech, Inc.'s business. Fab Tech, Inc. uses a variety of paints to accomplish this task for a variety of projects. Coating occurs in shop 1, 2, and 3.

Painting operations at Fab Tech, Inc. typically occurs 5 days per week, 8 hours per day throughout the year even though Fab Tech, Inc. is, "open" 6 days per week, 10 hours per day.

6.2 Control Device Descriptions

Table 6.1 Coating Operations Description

Emissions Units / Processes		Control Devices	
Paint Guns:	Paint 1	<u>Completely Enclosed Buildings with Filtration Control Devices:</u>	
Manufacturer:	Graco	Manufacturer:	Industrial Maid Overhead Air Filtration System
Model:	G40	Model:	T-6000
Type:	Air Assisted 65% HVLP	Filter:	MERV 15 or equivalent
		Type:	Air filtration and ventilation with pleated filters and bag filters
		Control efficiency:	90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives
Paint Guns:	Paint 2	<u>Completely Enclosed Buildings with Filtration Control Devices:</u>	
Manufacturer:	Graco	Manufacturer:	Industrial Maid Overhead Air Filtration System
Model:	G40	Model:	T-6000
Type:	Air Assisted 65% HVLP	Filter:	MERV 15 or equivalent
		Type:	Air filtration and ventilation with pleated filters and bag filters
		Control efficiency:	90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives
Paint Guns:	Paint 3	<u>Completely Enclosed Buildings with Filtration Control Devices:</u>	
Manufacturer:	Graco	Manufacturer:	Industrial Maid Overhead Air Filtration System
Model:	G40	Model:	T-4500
Type:	Air Assisted 65% HVLP	Filter:	MERV 15 or equivalent
		Type:	Air filtration and ventilation with pleated filters and bag filters
		Control efficiency:	90.94% or greater for PM ₁₀ and PM _{2.5} Or DEQ approved alternatives

[6/17/2019]

Emission Limits

6.3 Emission Limits

The emissions from the coating operations shall not exceed any corresponding emissions rate limits listed in Table 6.2.

Table 6.2 Coating Emission Limits ^(a)

Source Description	PM ₁₀ ^(b)		SO ₂		NO _x		CO		VOC	
	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)
Coating Operations	1.05E+00	6.84E-01	--	--	--	--	--	--	2.37E+01	1.54E+01

- In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
- Particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.
- Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.
- Tons per any consecutive 12-calendar month period.

[6/17/2019]

6.4 Opacity Limit

Emissions from the coating operations or any vent, or functionally equivalent opening associated with the coating operations, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

[4/12/2019]

Operating Requirements

6.5 Approved Daily Coating Usage Scenario

Unless the permittee is complying with an Alternate Daily Coating Usage Scenario which demonstrates compliance with Coating Emission Limits and Screening Emission Rates and Modeled Concentration Limits, the permittee shall comply with the daily coating usage limits in Table 6.3.

Table 6.3 Approved Daily Coating Usage Scenario

Coating Material	Daily Coating Usage Limit (gal/day) ^(a)
Forrest Technical Coatings-Copenhaver Gray	60
Forrest Technical Coatings-Fab Tech White	
Forrest Technical Coatings-Flame Red	
Forrest Technical Coatings-Graphite Gray	
Forrest Technical Coatings-Gray Primer	
Forrest Technical Coatings-Safety Yellow	
Forrest Technical Coatings-Signal Blue	
Forrest Technical Coatings-Stone	
Forrest Technical Coatings-Superior Orange	
Forrest Technical Coatings-Rim Yellow	
Forrest Technical Coatings-Terra Cotta	
Forrest Technical Coatings-Kolberg Beige	
Forrest Technical Coatings-White Primer	
Forrest Technical Coatings-Norberg Tan	
Forrest Technical Coatings-New Cat Yellow	
Forrest Technical Coatings-HAPs Free Thinner	6

a) Gallons per calendar Day

[6/17/2019]

6.6 Annual Coating Usage Limits

The permittee shall not exceed the annual coating usage limits in Table 6.4.

Table 6.4 Annual Coating Usage Limits

Coating Material	Annual Coating Usage Limit (gal/year)^(a)
Forrest Technical Coatings-Copenhaver Gray	7800
Forrest Technical Coatings-Fab Tech White	
Forrest Technical Coatings-Flame Red	
Forrest Technical Coatings-Graphite Gray	
Forrest Technical Coatings-Gray Primer	
Forrest Technical Coatings-Safety Yellow	
Forrest Technical Coatings-Signal Blue	
Forrest Technical Coatings-Stone	
Forrest Technical Coatings-Superior Orange	
Forrest Technical Coatings-Rim Yellow	
Forrest Technical Coatings-Terra Cotta	
Forrest Technical Coatings-Kolberg Beige	
Forrest Technical Coatings-White Primer	
Forrest Technical Coatings-Norberg Tan	
Forrest Technical Coatings-New Cat Yellow	
Forrest Technical Coatings-HAPs Free Thinner	780

a) Gallons per rolling consecutive 12-calendar-month period

[6/17/2019]

Alternate Daily Coating Usage Scenarios (If Applicable)

Unless using a Daily Coating Usage Scenario for which compliance has previously been determined in Table 6.2 (such as when new or reformulated coating materials are introduced), each day before coating materials are used the permittee shall follow the procedures of this section. The permittee shall not use any new Daily Coating Usage Scenario until coating TAP compliance and Coating Emission Limit compliance have been demonstrated for that Scenario according to the following permit conditions.

[4/12/2019]

6.7 Propose a Daily Coating Usage Scenario

Prior to using or implementing a new Daily Coating Usage Scenario:

- The permittee shall propose and record maximum daily coating usage limits for each coating material that will be used in the Scenario, in gallons per day (gal/day). The permittee shall not use or implement any Scenario that does not have recorded maximum daily coating usage limits.
- The permittee shall estimate emissions of PM₁₀/PM_{2.5}, VOC, individual HAP, total HAP, and all TAP listed in Table 6.2 for the Scenario (lb/day for each pollutant), using the procedures described below for estimating emissions.

- The permittee shall demonstrate coating TAP compliance for the Scenario, using the procedures described below for demonstrating coating TAP compliance. The permittee shall not use or implement any Scenario that does not demonstrate coating TAP compliance.
- The permittee shall demonstrate Coating Emission Limit compliance for the Scenario, using the procedures described below for demonstrating Coating Emission Limit compliance. The permittee shall not use or implement any Scenario that does not demonstrate Coating Emission Limit compliance.
- The daily coating usage limits and emission estimates used in determining coating TAP compliance and Coating Emission Limit compliance shall be based on estimated emissions from all coatings to be used from all coating operations at the facility (i.e., facility-wide).

[4/12/2019]

6.8 Estimate Coating TAP Emissions

TAP emissions shall be estimated for all TAP listed in Table 6.5:

- Emissions shall be estimated by multiplying each maximum daily coating usage rate (gal/day) by the TAP content (lb/gal) of that coating, and summing the total emissions from all coating materials (lb/day). TAP emissions which are designated as a particulate in Table 6.4 may also be multiplied by one minus the documented spray gun transfer efficiency and by one minus the documented filtration system control efficiency when control equipment will be applied to such emissions.
- TAP content (lb/gal) of a coating is specified on the Safety Data Sheet (SDS) for that coating, or shall be calculated by multiplying the weight percentage of TAP (%) by the density (lb/gal) of the coating from the SDS.
- For TAP content, if a range is presented on the SDS for a coating, the highest value of the range shall be used when estimating emissions.
- When the TAP content is listed as below detection on SDS or other documentation, the TAP content shall be assumed equal to the coating density divided by 100 (i.e., 1% of density in lb/gal) when estimating emissions.
- When the TAP content cannot be determined from SDS or other documentation, the TAP content shall be assumed equal to the density of the coating (lb/gal) when estimating emissions.

[4/12/2019]

6.9 Demonstrate Coating TAP Compliance

For each Daily Coating Usage Scenario, the permittee shall estimate TAP emissions and compare against the TAP Screening Emission Rates or Modeled Concentration Limits in Table 6.5:

- The permittee shall compare estimated TAP emissions for all coatings against the Screening Emission Rates in Table 6.5. For emissions equal or less than the Screening Emission Rate, modeling analyses is not required. For emissions in excess of the Screening Emission Rate, modeling analyses is required to determine the maximum modeled concentration.
- Modeled emissions from all coating operations for a Daily Coating Usage Scenario shall not exceed the Modeled Concentration Limits in Table 6.5. The permittee shall not use or implement any Scenario that exceeds a Modeled Concentration Limit.
- All modeling analyses shall use EPA-approved models and follow relevant guidance in the most recent version of the “State of Idaho Guideline for Performing Air Quality Impact Analyses,” available for download at DEQ’s website.

Table 6.5 TAP Screening Emission Rates and Modeled Concentration Limits

Regulated TAP	CAS	Particulate?	Screening Emission Rate (lb/day) ^(a)	Modeled Concentration Limit (mg/m³) ^(b)
Acetone	67-64-1	No	2856	89
Aluminum - Metal and Oxide	7429-90-5	Yes	16.008	0.5
Aluminum - Soluble Salts	7429-90-5	Yes	3.192	0.1
n-Amyl Acetate	628-63-7	No	847.2	26.5
Barium (Soluble Compounds), as Ba	7440-39-3	Yes	0.792	0.025
2-Butoxyethanol	111-76-2	No	192	6
n-Butyl Acetate	123-86-4	No	1135.2	35.5
n-Butyl Alcohol	71-36-3	No	240	7.5
Calcium Carbonate	1317-65-3	Yes	16.008	0.5
Carbon Black	1333-86-4	Yes	5.52	0.175
Cyclohexane	110-82-7	No	1680	52.5
Cyclohexanone	108-94-1	No	160.08	5
Diacetone Alcohol	123-42-2	No	384	12
Dibutyl Phthalate	84-74-2	No	7.992	0.25
o-Dichlorobenzene	95-50-1	No	480	15
Diethyl Phthalate	84-66-2	No	7.992	0.25
Diisobutyl Ketone	108-83-8	No	232.08	7.25
Dimethylphthalate	131-11-3	No	7.992	0.25
Dipropylene Glycol Methyl Ether	34590-94-8	No	960	30
2,6-Di- <i>tert</i> -butyl-p-cresol (butylated hydroxytoluene)	128-37-0	No	16.008	0.5
Ethyl Acetate	141-78-6	No	2239.2	70
Ethyl Alcohol	64-17-5	No	3000	94
Heptane (n-Heptane)	142-82-5	No	2616	82
Iron Oxide Fume (Fe ₂ O ₃) as Fe	1309-37-1	Yes	7.992	0.25
Isobutyl Acetate	110-19-0	No	1120.8	35
Isobutyl Alcohol	78-83-1	No	240	6
Isophorone Diisocyanate	4098-71-9	No	0.144	0.0045
Isopropyl Acetate	108-21-4	No	1663.2	52
Isopropyl Alcohol	67-63-0	No	1567.2	49
Kaolin	1332-58-7	Yes	3.192	0.1
Magnesite	546-93-0	Yes	16.008	0.5
Methacrylic Acid	79-41-4	No	112.08	3.5
Methyl Acetate	79-20-9	No	976.8	30.5
Methyl Ethyl Ketone (MEK)	78-93-3	No	943.2	29.5
Methyl Isoamyl Ketone	110-12-3	No	384	12
Methyl Isobutyl Carbinol	108-11-2	No	166.32	5.2

Regulated TAP	CAS	Particulate?	Screening Emission Rate (lb/day) ^(a)	Modeled Concentration Limit (mg/m ³) ^(b)
Methyl n-Amyl Ketone	110-43-0	No	376.8	11.75
Methyl Propyl Ketone	107-87-9	No	1120.8	35
Mica (Respirable Dust)	12001-26-2	Yes	4.8	0.15
Molybdenum as Mo	7439-98-7	Yes	7.992	0.25
Nonane	111-84-2	No	1680	52.5
Pentane	109-66-0	No	2832	88.5
Phosphoric Acid	7664-38-2	No	1.608	0.05
Propionic Acid	79-09-4	No	48	1.5
n-Propyl Acetate	109-60-4	No	1344	42
Propyl Alcohol	71-23-8	No	799.2	25
Silica – Amorphous, including: • Diatomaceous Earth (uncalcined) • Precipitated Silica • Silica Gel	61790-53-2 112926-00-8	Yes	16.008	0.5
Silica - Crystalline - Cristobalite	14464-46-1	Yes	0.0792	0.0025
Silica - Crystalline Quartz & Fused Silica	14808-60-7	Yes	0.1608	0.005
Stoddard Solvent	8052-41-3	No	840	26.25
Tetrahydrofuran	109-99-9	No	943.2	29.5
Trimethyl Benzene (Mixed and Individual Isomers)	25551-13-7	No	196.8	6.15
tert-Butyl acetate	540-88-5	No	1519.2	47.50
VM&P Naphtha	8032-32-4	No	2191.2	68.5
Zinc	7440-66-6	Yes	16.008	0.5
Zinc Oxide Dust	1314-13-2	Yes	16.008	0.5

- a) Worst-case pounds of emissions from all coating operations (combined) per day, as calculated using procedures in this permit to estimate these emissions, or as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference method, or DEQ-approved alternative.
- b) Milligrams of toxic air pollutant (TAP) per cubic meter, modeling proposed emission rates calculated using a daily averaging period.

[6/17/2019]

6.10 Demonstrate Coating Emission Limit Compliance

For each Daily Coating Usage Scenario, emissions from all coating operations shall be estimated and compared against the Coating Emission Limits in Table 6.2:

- PM₁₀/PM_{2.5} emissions shall be estimated by multiplying each coating maximum daily coating usage rate (gal/day) by the solids content (lb/gal) of that coating, and summing the total emissions from all coatings (lb/day). Emissions may also be multiplied by one minus the transfer efficiency and by one minus the filter control efficiency when control equipment will be applied to such emissions.
- VOC emissions shall be estimated by multiplying each coating maximum daily coating usage rate (gal/day) by the VOC content (lb/gal) for that coating material, and summing the total emissions from all coating materials (lb/day).

- HAP emissions shall be estimated by multiplying each coating maximum daily coating usage rate (gal/day) by the HAP content (lb/gal) for each coating material, and summing the total emissions from all coating materials (lb/day).
- For solids content, VOC content, and HAP content, if a range is presented on the SDS for a coating, the highest value of the range shall be used when estimating emissions.
- When the solids content, VOC content, or HAP content is listed as below detection on SDS or other documentation, the HAP content shall be assumed equal to the coating density divided by 100 (i.e., 1% of density in lb/gal) when estimating emissions.
- When the solids content, VOC content, or HAP content cannot be determined from SDS or other documentation, the content shall be assumed equal to the density of the coating (lb/gal) when estimating emissions.
- The permittee shall compare estimated emissions for all coating materials against the Coating Emission Limits in Table 6.2. The permittee shall not use or implement any Scenario that exceeds a Coating Emission Limit.

[4/12/2019]

Monitoring and Recordkeeping Requirements

6.11 Coating Usage Scenario Monitoring

Each calendar day on which coating materials are used, the permittee shall select and record the Daily Coating Usage Scenario that will be used for that day, and comply with the maximum daily coating usage limits specified for the selected Scenario.

- Only one Daily Coating Usage Scenario may be used each calendar day.
- The permittee shall not exceed any daily coating usage limit for the Scenario chosen that calendar day.
- The permittee shall maintain documentation such as coating material SDS, manufacturer's specification sheets that support filter control efficiencies, transfer efficiencies, capture efficiencies, and other engineering assumptions relied upon in emission calculations.

[4/12/2019]

6.12 Coating Material Usage Recordkeeping

Each calendar day on which coating materials are used, the permittee shall collect and maintain records of the quantity of each material used, including but not limited to primers, paints, thinners, and solvents to demonstrate compliance with Approved or Alternate Daily Coating Usage Limits.

[4/12/2019]

6.13 Coating Material Purchase and Safety Data Sheet Recordkeeping

For each coating material used at the facility, including but not limited to primers, paints, thinners, and solvents, the permittee shall record and maintain the following records:

- Material purchase records
- Safety Data Sheets (SDS)

[4/12/2019]

6.14 Coating Usage Scenario Reporting

Each year, for Coating Usage Scenarios that have not already been approved, the permittee shall submit a report by May 1st on all unapproved Daily Coating Usage Scenarios used each calendar

day during the previous 365-day period. The report shall include documentation supporting the TAP compliance demonstrations and the Coating Emission Limit compliance demonstrations relied upon for each Daily Coating Usage Scenario, and any modeling analyses conducted in each coating TAP compliance demonstration. Documentation should be in sufficient detail, including documentation of all calculations and electronic copies of modeling files, such that DEQ can verify the analysis. The report shall be titled "Permit-Required TAP Compliance Report" and shall be sent to:

DEQ State Office
Air Quality Division
1410 N. Hilton
Boise, ID 83706

[4/12/2019]

6.15 Filter System Procedures

The permittee shall install and operate a filter system consisting of MERV-15 or equivalent filters to control PM_{2.5}, PM₁₀ emissions from the plasma cutting operations, with a control efficiency of 90.94% or greater.

[6/17/2019]

6.16 Filter System Documentation

The permittee shall keep the documentation of the filter control efficiencies from the manufacturer to show the filters have control efficiencies for PM_{2.5} and PM₁₀ equal or greater than 90.94%.

Or

For DEQ approved alternatives, the permittee shall keep the documentation on the filter control efficiencies from the manufacturer to show control efficiencies for PM_{2.5} and PM₁₀ equal or greater than 90.94%.

[6/17/2019]

40 CFR 63 Subpart HHHHHH Requirements (If Applicable)

6.17 40 CFR 63, Subpart HHHHHH-National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources Reporting Requirement

Fab Tec does not use paints containing any target HAP: chromium, lead, manganese, cadmium and nickel, therefore Fab Tec has petitioned the EPA Administrator for an exemption from the requirements of Subpart HHHHHH. On March 7, 2019 EPA Region 10 accepted FAB Tech's exemption petition and issued the facility a letter. The following is a breakdown of the subpart as it would apply to the facility in the event the facility changes the coating materials to include the five target metals, and does not meet the exemption criteria:

- The permittee shall meet the requirements of 40 CFR 63.11173(e)(1). All painters must be certified that they have completed training in the proper spray application of surface coatings and the proper setup and maintenance of spray equipment. The minimum requirements for training and certification are described in 40 CFR 63.11173(f). The spray application of surface coatings is prohibited by persons who are not certified as having completed the training described in 40 CFR 63.11173(f).
- All spray-applied coatings must be applied in a spray booth, preparation station, or mobile enclosure that meets the requirements of 40 CFR 63.11173(e)(2).

- All spray booths, preparation stations, and mobile enclosures must be fitted with a type of filter technology that is demonstrated to achieve at least 98% capture of paint overspray. The procedure used to demonstrate filter efficiency must be consistent with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Method 52.1.
- Spray booths and preparation stations used to refinish complete motor vehicles or mobile equipment must be fully enclosed with a full roof, and four complete walls or complete side curtains, and must be ventilated at negative pressure so that air is drawn into any openings in the booth walls or preparation station curtains. However, if a spray booth is fully enclosed and has seals on all doors and other openings and has an automatic pressure balancing system, it may be operated at up to, but not more than, 0.05 inches water gauge positive pressure.
- Spray booths and preparation stations that are used to coat miscellaneous parts and products or vehicle subassemblies must have a full roof, at least three complete walls or complete side curtains, and must be ventilated so that air is drawn into the booth. The walls and roof of a booth may have openings, if needed, to allow for conveyors and parts to pass through the booth during the coating process.
- All spray-applied coatings must be applied with a high volume, low pressure (HVLP) spray gun, electrostatic application, airless spray gun, or air-assisted airless spray gun, in accordance with 40 CFR 63.11173(e)(3).
- All paint spray gun cleaning must be done so that an atomized mist or spray of gun cleaning solvent and paint residue is not created outside of a container that collects used gun cleaning solvent, in accordance with 40 CFR 63.11173(e)(4). Spray gun cleaning may be done by using a fully enclosed spray gun washer.
- The permittee shall ensure and certify that all new and existing personnel, including contract personnel, who spray apply surface coatings, as defined in 40 CFR 63.11180, are trained in the proper application of surface coatings as required by 40 CFR 63.11173(e)(1), in accordance with 40 CFR 63.11173(f). The training program must include, at a minimum:
 - A list of all current personnel by name and job description who are required to be trained;
 - Hands-on and classroom instruction that addresses, at a minimum, initial and refresher training in the following topics:
 - Spray gun equipment selection, set up, and operation, including measuring coating viscosity, selecting the proper fluid tip or nozzle, and achieving the proper spray pattern, air pressure and volume, and fluid delivery rate;
 - Spray technique for different types of coatings to improve transfer efficiency and minimize coating usage and overspray, including maintaining the correct spray gun distance and angle to the part, using proper banding and overlap, and reducing lead and lag spraying at the beginning and end of each stroke;
 - Routine spray booth and filter maintenance, including filter selection and installation; and,
 - Environmental compliance with the requirements of 40 CFR 63, Subpart HHHHHH.

- A description of the methods to be used at the completion of initial or refresher training to demonstrate, document, and provide certification of successful completion of the required training. Owners and operators who can show by documentation or certification that a painter's work experience and/or training has resulted in training equivalent to the training required are not required to provide the initial training to these painters.
- All new and existing personnel at the facility, including contract personnel, who spray apply surface coatings, as defined in 40 CFR 63.11180, must be trained by the dates specified in 40 CFR 63.11173(g). Employees who transfer within a company to a position as a painter are subject to the same requirements as a new hire.
 - All personnel must be trained and certified no later than 180 days after hiring. Painter training that was completed within five years prior to the date training is required, and that meets the requirements specified in 40 CFR 63.11173(f)(2) of this section satisfies this requirement and is valid for a period not to exceed five years after the date the training is completed.
 - Training and certification will be valid for a period not to exceed five years after the date the training is completed, and all personnel must receive refresher training that meets the requirements of this section and be re-certified every five years.

[6/17/2019]

6.16 40 CFR 63, Subpart HHHHHH – MACT Standards and Management Practices for Paint Stripping and Miscellaneous Surface Coating Operations, Applicability of General Provisions

Unless an exemption from EPA has been granted to this facility, the parts of the General Provisions which apply to the permittee are specified in the following table, in accordance with 40 CFR 63.11174(a).

Table 6.6 Applicability of General Provisions to Subpart HHHHHH of Part 63

Citation	Subject	Explanation
40 CFR 63.1(a)(1)-(12)	General Applicability	
40 CFR 63.1(b)(1)-(3)	Initial Applicability Determination	Applicability of subpart HHHHHH is also specified in 40 CFR 63.11170.
40 CFR 63.1(c)(1)	Applicability After Standard Established	
40 CFR 63.1(c)(2)	Applicability of Permit Program for Area Sources	
40 CFR 63.1(c)(5)	Notifications	
40 CFR 63.2	Definitions	Additional definitions are specified in 40 CFR 63.11180.
40 CFR 63.3(a)-(c)	Units and Abbreviations	
40 CFR 63.4(a)(1)-(5)	Prohibited Activities	
40 CFR 63.4(b)-(c)	Circumvention/Fragmentation	
40 CFR 63.6(a)	Compliance With Standards and Maintenance Requirements—Applicability	
40 CFR 63.6(b)(1)-(7)	Compliance Dates for New and Reconstructed Sources	40 CFR 63.11172 specifies the compliance dates.
40 CFR 63.6(c)(1)-(5)	Compliance Dates for Existing Sources	40 CFR 63.11172 specifies the compliance dates.
40 CFR 63.6(e)(1)-(2)	Operation and Maintenance	
40 CFR 63.6(f)(1)	Compliance Except During Startup, Shutdown, and Malfunction	
40 CFR 63.6(f)(2)-(3)	Methods for Determining Compliance	
40 CFR 63.6(g)(1)-(3)	Use of an Alternative Standard	
40 CFR 63.6(i)(1)-(16)	Extension of Compliance	
40 CFR 63.6(j)	Presidential Compliance Exemption	
40 CFR 63.9(a)-(d)	Notification Requirements	40 CFR 63.11175 specifies notification requirements.
40 CFR 63.9(i)	Adjustment of Submittal Deadlines	

Citation	Subject	Explanation
40 CFR 63.9(j)	Change in Previous Information	40 CFR 63.11176(a) specifies the dates for submitting the notification of changes report.
40 CFR 63.10(a)	Recordkeeping/Reporting—Applicability and General Information	
40 CFR 63.10(b)(1)	General Recordkeeping Requirements	Additional requirements are specified in 40 CFR 63.11177.
40 CFR 63.10(b)(2)(xii)	Waiver of recordkeeping requirements	
40 CFR 63.10(b)(2)(xiv)	Records supporting notifications	
40 CFR 63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations	
40 CFR 63.10(d)(1)	General Reporting Requirements	Additional requirements are specified in 40 CFR 63.11176.
40 CFR 63.10(d)(4)	Progress Reports for Sources With Compliance Extensions	
40 CFR 63.10(f)	Recordkeeping/Reporting Waiver	
40 CFR 63.12	State Authority and Delegations	
40 CFR 63.13	Addresses of State Air Pollution Control Agencies and EPA Regional Offices	
40 CFR 63.14	Incorporation by Reference	Test methods for measuring paint booth filter efficiency and spray gun transfer efficiency in 40 CFR 63.11173(e)(2) and (3) are incorporated and included in 40 CFR 63.14.
40 CFR 63.15	Availability of Information/Confidentiality	
40 CFR 63.16(a)	Performance Track Provisions—reduced reporting	

[4/12/2019]

6.17 40 CFR 63, Subpart HHHHHH – MACT Standards and Management Practices for Paint Stripping and Miscellaneous Surface Coating Operations, Recordkeeping

Unless an exemption from EPA has been granted to this facility, in accordance with 40 CFR 63.11172(a)(2), on and after the date of initial startup of this facility the permittee shall comply with the applicable emission limitations and requirements of the National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63, Subpart HHHHHH.

- The permittee shall keep the following records in accordance with 40 CFR 63.11177(a), (b), (d), (g), and (h) as applicable.
 - Certification that each painter has completed the training specified in 40 CFR 63.11173(f) with the date the initial training and the most recent refresher training was completed.
 - Documentation of the filter efficiency of any spray booth exhaust filter material, according to the procedure in 40 CFR 63.11173(e)(3)(i).
 - Copies of any notification submitted as required by 40 CFR 63.11175 and copies of any report submitted as required by 40 CFR 63.11176.
 - Records of any deviation from the requirements in 40 CFR 63.11173, 63.11174, 63.11175, or 63.11176. These records must include the date and time period of the deviation, and a description of the nature of the deviation and the actions taken to correct the deviation.
 - Records of any assessments of source compliance performed in support of the initial notification, notification of compliance status, or annual notification of changes report.

- In accordance with 40 CFR 63.11178(a), the permittee shall maintain copies of the records specified in 40 CFR 63.11177 for a period of at least five years after the date of each record. Copies of records must be kept on site and in a printed or electronic form that is readily accessible for inspection for at least the first two years after their date, and may be kept off-site after that two year period.

[4/12/2019]

6.18 40 CFR 63, Subpart HHHHHH – MACT Standards and Management Practices for Paint Stripping and Miscellaneous Surface Coating Operations, Reports

Unless an exemption from EPA has been granted to this facility, in accordance with 40 CFR 63.11172(a)(2), on and after the date of initial startup of this facility the permittee shall comply with the applicable emission limitations and requirements of the National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63, Subpart HHHHHH.

- Annual Notification of Changes Report. In accordance with 40 CFR 63.11176, the permittee is required to submit a report in each calendar year in which information previously submitted in either the initial notification required by 40 CFR 63.11175(a), Notification of Compliance, or a previous annual notification of changes report submitted has changed. Deviations from the relevant requirements in 40 CFR 63.11173(a) through (d) or 40 CFR 63.11173(e) through (g) on the date of the report will be deemed to be a change. The annual notification of changes report must be submitted prior to March 1 of each calendar year when reportable changes have occurred and must include the following information.
 - The company's name and the street address (physical location) of the affected source and the street address where compliance records are maintained, if different.
 - The name, title, address, telephone, e-mail address (if available) and signature of the owner and operator, or other certifying company official, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart or an explanation of any noncompliance and a description of corrective actions being taken to achieve compliance.
- Any notifications or reporting required by the National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63, Subpart HHHHHH or Subpart A – General Provisions shall be submitted to both of the following addresses in accordance with 40 CFR 63.13:

EPA Region 10, Mail Stop: OAW-150
1200 Sixth Avenue, Suite 900
Seattle, WA 98101

and,

DEQ Lewiston Regional Office
1118 "F" St.
Lewiston, ID 83501
fax: (208) 799-3451

[4/12/2019]

6.19 Incorporation of Federal Requirements by Reference

Unless expressly provided otherwise, any reference in this permit to any document identified in IDAPA 58.01.01.107.03 shall constitute the full incorporation into this permit of that document

for the purposes of the reference, including any notes and appendices therein. Documents include, but are not limited to:

- National Emission Standards for Hazardous Air Pollutants (NESHAP) Area Sources, 40 CFR Part 63, Subpart HHHHHH.

For permit conditions referencing or cited in accordance with any document incorporated by reference (including permit conditions identified as NESHAP), should there be any conflict between the requirements of the permit condition and the requirements of the document, the requirements of the document shall govern, including any amendments to that regulation.

[4/12/2019]

7 Shop Heaters

7.1 Process Description

Fab Tech operates 26 natural gas heaters for comfort throughout the colder months of the year. Each unit has a capacity of 90,000 btu/hr. To ensure a conservative emissions estimate, it is assumed that they operate on a year-round basis during every hour that Fab Tec is open and operating (3,120 hours per year) even though the units are not typically operated during warmer months.

[4/12/2019]

7.2 Control Device Descriptions

Table 7.1 Shop Heaters Description

Emissions Units / Processes	Control Devices
Shop #1 Heaters H1-H7	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-4500 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM10 and PM2.5 Or DEQ approved alternatives
Shop #2 Heaters H8-H17	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM10 and PM2.5 Or DEQ approved alternatives
Shop #3 Heaters H18-H26	<u>Completely Enclosed Buildings with Filtration Control Devices:</u> Manufacturer: Industrial Maid Overhead Air Filtration System Model: T-6000 Filter: MERV 15 or equivalent Type: Air filtration and ventilation with pleated filters and bag filters Control efficiency: 90.94% or greater for PM10 and PM2.5 Or DEQ approved alternatives

[6/17/2019]

Emission Limits

7.3 Emission Limits

The emissions from the Shop Heaters shall not exceed any corresponding emissions rate limits listed in Table 7.2.

Table 7.2 Coating Emission Limits ^(a)

Source Description	PM ₁₀ ^(b)		SO ₂		NO _x		CO		VOC	
	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)	lb/hr ^(c)	T/yr ^(d)
Heaters #1-#26	1.52E-03	2.37E-03	1.32E-03	2.06E-03	2.07-E01	3.23-E01	8.82-E02	1.38-E01	1.21-E02	1.89-E02

- In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
- Particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.
- Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.
- Tons per any consecutive 12-calendar month period.

[6/17/2019]

7.4 Opacity Limit

Emissions from the Shop Heaters 1, 2, and 3 or any vent, or functionally equivalent opening associated with the shop heaters, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

[4/12/2019]

7.5 Fuel-Burning Equipment

The permittee shall not discharge to the atmosphere from any fuel-burning equipment PM in excess of 0.015 grains per dry standard cubic foot (gr/dscf) of effluent gas corrected to 3% oxygen by volume for gas.

[4/12/2019]

Operating Requirements

7.6 Fuel Requirements

Shop heaters shall combust natural gas exclusively.

[4/12/2019]

7.7 Natural Gas Usage Limits

Natural gas usage shall not exceed 7.15 million standard cubic feet (MMscf) per any consecutive 12-month period.

[4/12/2019]

Monitoring and Recordkeeping Requirements

7.8 Annual Natural Gas Usage Limits Monitoring

Each calendar month, the permittee shall monitor and record the natural gas usage for the previous month in scf per month. Natural gas usage shall be determined by summing the monthly usage over the previous consecutive 12-month period to demonstrate compliance with the Natural Gas Usage Limits permit condition.

[4/12/2019]

7.9 Filter System Procedures

The permittee shall install and operate a filter system consisting of MERV-15 filters to control PM_{2.5}, PM₁₀ emissions from the shop heaters, with a control efficiency of 90.94% or greater.

[6/17/2019]

7.10 Filter System Documentation

The permittee shall keep the documentation of the filter control efficiencies from the manufacturer to show the filters have control efficiencies for PM_{2.5} and PM₁₀ equal or greater than 90.94%.

Or

For DEQ approved alternatives, the permittee shall keep the documentation on the filter control efficiencies from the manufacturer to show control efficiencies for PM_{2.5} and PM₁₀ equal or greater than 90.94%.

[6/17/2019]

8 General Provisions

General Compliance

- 8.1 The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the "Rules for the Control of Air Pollution in Idaho." The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit, the "Rules for the Control of Air Pollution in Idaho," and the Environmental Protection and Health Act (Idaho Code §39-101, et seq).

[Idaho Code §39-101, et seq.]

- 8.2 The permittee shall at all times (except as provided in the "Rules for the Control of Air Pollution in Idaho") maintain in good working order and operate as efficiently as practicable all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[IDAPA 58.01.01.211, 5/1/94]

- 8.3 Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules, and regulations.

[IDAPA 58.01.01.212.01, 5/1/94]

Inspection and Entry

- 8.4 Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:

- Enter upon the permittee's premises where an emissions source is located, emissions-related activity is conducted, or where records are kept under conditions of this permit;
- Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
- Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
- As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108]

Construction and Operation Notification

- 8.5 This permit shall expire if construction has not begun within two years of its issue date, or if construction is suspended for one year.

[IDAPA 58.01.01.211.02, 5/1/94]

- 8.6 The permittee shall furnish DEQ written notifications as follows:

- A notification of the date of initiation of construction, within five working days after occurrence; except in the case where pre-permit construction approval has been granted then notification shall be made within five working days after occurrence or within five working days after permit issuance whichever is later;
- A notification of the date of any suspension of construction, if such suspension lasts for one year or more; and

- A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

[IDAPA 58.01.01.211.01, 5/1/94]

- A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date; and
- A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date.

[IDAPA 58.01.01.211.03, 5/1/94]

Performance Testing

8.7 If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

8.8 All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

8.9 Within 60 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/00 and 4/11/15]

Monitoring and Recordkeeping

8.10 The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Monitoring records shall include, but not be limited to, the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.211, 5/1/94]

Excess Emissions

- 8.11** The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130–136 for excess emissions due to start-up, shut-down, scheduled maintenance, safety measures, upsets, and breakdowns.

[IDAPA 58.01.01.130–136, 4/5/00]

Certification

- 8.12** All documents submitted to DEQ—including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification—shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

[IDAPA 58.01.01.123, 5/1/94]

False Statements

- 8.13** No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.125, 3/23/98]

Tampering

- 8.14** No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

Transferability

- 8.15** This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/06]

Severability

- 8.16** The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

[IDAPA 58.01.01.211, 5/1/94]